



MODEL CO2120PDN—User's Manual
*120V Plug-In Carbon Monoxide Alarm
With Digital Display and Silence Feature*

120V AC 60 Hz .085A Standby .087A Alarm



M06-1045-000 6/99

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LIMITED WARRANTY	BACK COVER

PLEASE READ CAREFULLY AND SAVE: This unit was shipped with a user's manual that contains important information about its operation. If you are installing this unit for use by others, you must leave this manual—or a copy of it—with the user.

CHAPTER 1: *Introduction*

BASIC SAFETY INFORMATION

IMPORTANT!

Dangers, Warnings, and Cautions alert you to important operating instructions or to potentially hazardous situations. Pay special attention to these items.

IMPORTANT!

THIS IS NOT A SMOKE ALARM! This CO Alarm is designed to detect carbon monoxide from ANY source of combustion. It is NOT designed to detect smoke, fire, or any other gas.

IMPORTANT!

This CO Alarm is approved for use in single-family residences. It is NOT designed for marine use.

⚠ CAUTION!

This CO Alarm will only indicate the presence of carbon monoxide gas at the sensor. Carbon monoxide gas may be present in other areas.

⚠ WARNING!

The Silence Feature is for your convenience only and will not correct a CO problem. Always check your home for a potential problem after any alarm. Failure to do so can result in injury or death.

⚠ WARNING!

This CO Alarm can not operate without continuous electricity. It does not operate during a power failure.

⚠ WARNING!

NEVER ignore your Carbon Monoxide Alarm if it alarms. Refer to "What To Do If Your CO Alarm Alarms" for more information. Failure to do so can result in injury or death.

⚠ WARNING!

Test the CO Alarm once a week. If the CO Alarm ever fails to test correctly, have it replaced immediately! If the CO Alarm is not working properly, it cannot alert you to a problem.

⚠ WARNING!

This product is intended for use in ordinary indoor locations of family living units. It is not designed to measure CO levels in compliance with Occupational Safety and Health Administration (OSHA) commercial or industrial standards. Individuals with medical conditions may consider using warning devices which provide audible and visual signals for carbon monoxide concentrations under 30 ppm.

HOW YOUR CO ALARM WORKS

General Information

⚠ CAUTION!

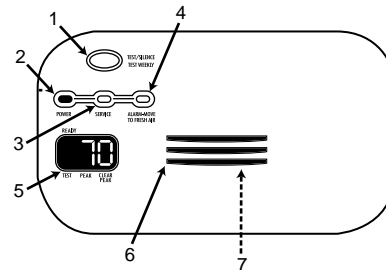
Leave your CO Alarm plugged in year-round. CO problems can occur any time during the year, and this alarm can only alert you if it is plugged in and receiving power.

This CO Alarm is intended for use in a standard, unswitched 120V AC wall outlet. It is not intended for use in extension cords, power strips, or outlets controlled by a switch or dimmer. These may not provide continuous power to the unit. When fully powered, it samples the air and takes a new reading about every second. A microchip inside the unit stores each reading, and remembers the levels of CO it has been exposed to over time. The unit goes into alarm mode when it has been exposed to a "critical" level of CO (measured in parts per million or "ppm") within a specified time (measured in minutes). When the unit is in alarm mode, the Digital Display will show the levels of CO, measured in parts per million, present. This Carbon Monoxide Alarm features a permanently installed sensor, three colored indicator lights, and an 85 dB alarm horn. It also has a silence feature to temporarily quiet the alarm horn.

Malfunction Warning

This unit performs self-diagnostic tests approximately every second. If the Alarm malfunctions, it should be replaced immediately.

The Cover Of Your CO Alarm



- | | |
|---|---|
| 1 | Test/Silence Button: Press and release to select mode (Test, Peak or Clear Peak); Press and hold to execute function (Test, Peak or Clear Peak), or to silence the alarm. |
| 2 | POWER Light (Green) |
| 3 | SERVICE Light (Yellow) |
| 4 | ALARM Light (Red) |
| 5 | Digital Display: Shows carbon monoxide levels, measured in parts per million. |
| 6 | Air Vents |
| 7 | Alarm Horn: 85db audible alarm for test, alarm, and unit malfunction warning. |

WHAT THE DIGITAL DISPLAY CAN SHOW YOU







The Digital Display is designed to indicate estimated carbon monoxide levels in a residential environment. It is not intended for use as an industrial or commercial grade meter. The Digital Display shows the amount of carbon monoxide (measured in parts per million) the unit is sensing. An average, healthy adult should not feel symptoms when the unit first alarms. However, infants, the unborn, and people with cardiac or respiratory diseases may be more sensitive to CO exposure. See "What To Do If Your CO Alarm Alarms" for complete details on how to respond to an alarm.

Display Shows...	What It Means...
888	"888" is displayed briefly at power up, or when testing the CO Alarm.
30 (or higher)	Until the CO alarm detects at least 30 ppm of CO, it will not display a reading. It will only display levels of carbon monoxide 30 ppm or higher.
70 (or higher)	The unit is calibrated to sound an alarm before 240 minutes have passed when exposed to this level.
150 (or higher)	The unit is calibrated to sound an alarm before 50 minutes have passed when exposed to this level. At this level, an average healthy adult may feel headache within 90 minutes.
400 (or higher)	The unit is calibrated to sound an alarm before 15 minutes have passed when exposed to this level. This level may be life threatening to a normal healthy adult within three hours.
A number higher than 450	Over 450 ppm of CO has been detected. Evacuate immediately!

When Checking Peak CO Level

Display Shows...	What It Means...
Highest level of CO detected since the last time Peak was cleared	The peak reading lets you check if there was CO detected while you were away from home. In case of a CO alarm, it shows the emergency responder or technician how high CO levels were before they arrived.

WHAT THE LIGHTS AND ALARM TONES MEAN

<p>During Power Up (or After Power Outage)</p>  <p>Green light ON. Yellow & red lights OFF. Horn "chirps". Digital Display: Dash appears by "READY".</p>	<p>During an Alarm</p>  <p>Green light ON. Yellow light OFF. Red light FLASHES. Repeating horn pattern: 4 beeps, pause, 4 beeps, pause. Display: Shows CO levels in ppm.</p>
<p>During Normal Operation</p>  <p>Green light ON. Yellow & red lights OFF. Horn Silent. Digital Display: Dash appears by "READY".</p>	<p>During Alarm Malfunction</p>  <p>Green light ON. Yellow light ON. Red light FLASHES. Horn "chirps" about twice a minute. Digital Display: "Err"</p>
<p>During Normal Test</p>  <p>All three lights flash briefly. Horn pattern repeats twice: 4 beeps, pause, 4 beeps, pause. Digital Display: "888"</p>	<p>Using the Silence Feature in Alarm</p>  <p>Green light ON. Yellow light OFF. Red light FLASHES. Horn silent for 4 minutes. Refer to "Using the Silence Button" for details on the Silence feature. Digital Display: Shows CO levels in ppm.</p>

THE PEAK CO FEATURE

This feature lets you check the highest level of CO detected since you cleared the Peak memory. This feature also helps a CO investigator. Since you should ventilate your home after any alarm—and since CO dissipates in fresh air—CO levels may drop well below alarm levels by the time investigator arrives.

To check Peak CO:

1. Press and release the Test/Silence button until the dash scrolls to "PEAK".
2. Press and hold the Test/Silence button to display the peak CO level.



To clear Peak CO:

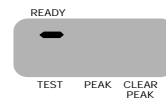
1. Press and release the Test/Silence button until the dash scrolls to "CLEAR PEAK."
2. Press and hold the Test/Silence button until the display shows "CLr."



NOTE:

The peak CO level will be saved, even after a power interruption, until you clear it.

The CO alarm will automatically switch back to "READY" immediately after you check or clear the peak CO level.



Examples of when to use the Peak CO Feature:

- To check if CO was detected while you were away on vacation.
- To check the highest level of CO recorded during an alarm, especially if you were not home when it started to alarm.
- To show an emergency responder or qualified appliance technician the highest level of CO detected before they arrived.

IMPORTANT!

DO NOT clear the peak CO reading if you plan to call someone to investigate a CO problem! Clear the peak CO reading only after the investigator has checked your home.

CO ALARM SPECIFICATIONS

Gas Detection at Typical Temperature and Humidity Ranges: The CO Alarm is not formulated to detect CO levels below 30 ppm typically. UL tested for false alarm resistance to Methane (500 ppm), Butane (300 ppm), Heptane (500 ppm), Ethyl Acetate (200 ppm), Isopropyl Alcohol (200 ppm) and Carbon Dioxide (5000 ppm). Values measure gas and vapor concentrations in parts per million.

Required Alarm Levels: Before 10% COHb exposure at levels of 30% to 70% Relative Humidity (RH):

- 400 ppm CO between 4 and 15 minutes
- 150 ppm CO between 10 and 50 minutes
- 70 ppm CO between 60 and 240 minutes

The unit is designed not to alarm when exposed to a constant level of 30 ppm for 30 days.

Audible Alarm: 85dB minimum at 10 feet

Power: Powered by 120V AC. When power is on, green light shines continuously. Digital Display: Dash lit by READY.

Display Accuracy: Accuracy is +100% -40% of actual concentration of CO at 50% RH +/- 5% RH and 73°F +/- 4°F (23°C +/- 2°C).

Peak CO Reading: Digital Display shows the highest level of CO (ppm) detected since the Peak memory was last cleared.

Malfunction: Yellow light shines continuously. Red light flashes. Horn chirps twice a minute. Digital Display will read "Err".

Dimensions: 5.83" x 3.32" x 1.6" (Approx.)

Supply Voltage: 120V AC 60Hz
.085A Standby .087A Alarm

During Alarm: CO Alarm horn sounds while the red light flashes rapidly. Digital Display: Shows CO levels in ppm.

Warranty: 5-year limited warranty.

Standards: Underwriters Laboratories Inc. Single and Multiple Station carbon monoxide alarms UL2034.

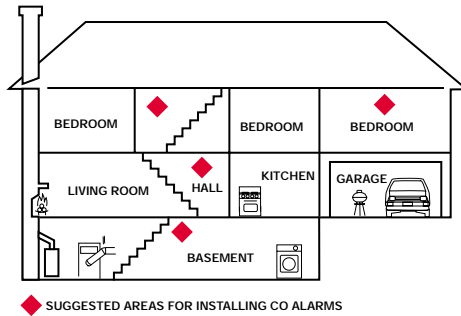
According to Underwriters Laboratories Inc. UL2034, Section 1-1.2: "Carbon monoxide alarms covered by these requirements are intended to respond to the presence of carbon monoxide from sources such as, but not limited to, exhaust from internal-combustion engines, abnormal operation of fuel-fired appliances, and fireplaces. CO alarms are intended to alarm at carbon monoxide levels below those that could cause a loss of ability to react to the dangers of Carbon Monoxide exposure." This CO Alarm monitors the air, and is designed to alarm before CO levels become life threatening. This allows you precious time to leave the house and correct the problem. This is only possible if alarms are located, installed, and maintained as described in this manual.

CHAPTER 2: *Installation*

WHERE TO INSTALL CO ALARMS

The Consumer Product Safety Commission (CPSC) recommends the use of at least one CO Alarm per household, located near the sleeping area. For added protection, install additional CO Alarms in each separate bedroom, and on every level of your home.

If your bedroom hallway is longer than 40 feet, install a CO Alarm at BOTH ends of the hallway.



In a Single-level Home:

- Install at least one CO Alarm near or within each separate sleeping area.
- For added protection, install an additional CO Alarm at least 20 feet (6 meters) away from the furnace or fuel burning heat source.

In a Multi-level Home:

- Install at least one CO Alarm near or within each separate sleeping area.
- For added protection, install at least one CO Alarm on each level of the home. If you have a basement, install that CO Alarm at the top of the basement stairs.
- For added protection, install an additional CO Alarm at least 20 feet (6 meters) away from the furnace or fuel burning heat source.

⚠ WARNING!

This unit does not work without power. Choose an outlet where it can't be accidentally unplugged or switched off by children. Keep small children away from the unit. Teach them not to play with it or unplug it. Explain what the alarms mean.

WHERE NOT TO INSTALL YOUR CO ALARM

DO NOT locate this CO Alarm:

- In garages, kitchens, furnace rooms, or in any extremely dusty, dirty or greasy areas.
- Closer than 20 feet away from a furnace or other fuel burning heat source, or fuel burning appliances like a water heater.
- Within 5 feet of any cooking appliance.
- In extremely humid areas. This alarm should be at least 10 feet from a bath or shower, sauna, humidifier, vaporizer, dishwasher, laundry room, utility room or other source of high humidity.
- In areas where temperature is colder than 40°F (4°C) or hotter than 100°F (38°C). These areas include unconditioned crawl spaces, unfinished attics, uninsulated or poorly insulated ceilings, porches, and garages.
- In turbulent air, like near ceiling fans, heat vents, air conditioners, fresh air returns, or open windows. Blowing air may prevent CO from reaching the sensors.
- In direct sunlight.
- In outlets covered by curtains or other obstruction.

WARNING!

This CO Alarm is designed for use inside a single-family home or apartment. It is not meant to be used in common lobbies, hallways, or basements of multi-family buildings unless working CO Alarms are also installed in each family living unit. CO Alarms in common areas may not be heard from inside individual family living units.

WARNING!

This CO Alarm alone is not a suitable substitute for complete detection systems in places which house many people, like hotels or dormitories, unless a CO Alarm is also placed in each unit.

WARNING!

DO NOT use this CO Alarm in warehouses, industrial or commercial buildings, special-purpose non-residential buildings, RVs, boats, or airplanes. This CO Alarm is specifically designed for residential use, and may not provide adequate protection in non-residential applications.

HOW TO INSTALL YOUR CO ALARM

WARNING!

This CO Alarm can not operate without continuous electricity. It does not operate during a power failure. Do not use in an extension cord, or outlet controlled by a dimmer or switch—unit must have a constant power supply.

CAUTION!

Leave your CO Alarm plugged in year-round. CO problems can occur any time during the year, and this alarm can only alert you if it is plugged in and receiving power.

1. Plug the unit into a standard UNSWITCHED 120V AC outlet. In horizontally or vertically positioned wall outlets, mount unit with Test/Silence button facing upward.
2. Make sure green light shines when you plug in the unit. It will shine continuously when unit is receiving power. The horn will “chirp” once during power up, or when power is restored after an outage.
3. Test by pressing the Test/Silence button firmly until the unit sounds: 4 beeps, pause, 4 beeps. The sequence should last 5-6 seconds. During testing, the green, yellow, and red lights flash. This is normal. “888” will appear on the Digital Display.

4. While testing the unit, have a family member check that the horn can be easily heard from the sleeping areas. The unit should be located where it can wake you if it alarms at night.

5. Find the pair of self-adhesive labels included with this CO alarm.

- On each label write in the phone number of your emergency responder (like 911) and a qualified appliance technician.
- Place one label near the CO Alarm, and the other label in the “fresh air” location you plan to go if the alarm sounds.

NOTE:

A qualified appliance technician is defined as “a person, firm, corporation, or company that either in person or through a representative, is engaged in and responsible for the installation, testing, servicing, or replacement of heating, ventilation, air conditioning (HVAC) equipment, combustion appliances and equipment, and/or gas fireplaces or other decorative combustion equipment.”

CHAPTER 3: *If Your CO Alarm Alarms*

WARNING!

Actuation of your CO alarm indicates the presence of carbon monoxide (CO) which can KILL YOU. In other words, when your CO Alarm alarms, you must not ignore it!

If the Alarm Signal Sounds:

1. Operate the Test/Silence button. Write down the numbers on the Digital Display and the current time.
2. Call your emergency services, fire department or 911. Write down the number of your local emergency service here:
3. Immediately move to fresh air—outdoors or by an open door or window. Do a head count to check that all persons are accounted for. Do not re-enter the premises, or move away from the open door or window until the emergency services responder has arrived, the premises have been aired out, and your CO alarm remains in its normal condition.
4. After following steps 1-3, if your CO alarm reactivates within a 24-hour period, repeat steps 1-3 and call a qualified appliance technician to investigate for sources of CO from fuel-burning equipment and appliances, and inspect for proper operation of this equipment. If problems are identified during this inspection have the equipment serviced

immediately. Note any combustion equipment not inspected by the technician, and consult the manufacturers' instructions, or contact the manufacturers directly, for more information about CO safety and this equipment. Make sure that motor vehicles are not, and have not, been operating in an attached garage or adjacent to the residence. Write down the number of a qualified appliance technician here:



"ALARM-MOVE TO FRESH AIR"

If you hear the alarm horn and the red light is flashing, move everyone to a source of fresh air. DO NOT unplug the CO Alarm!

Finding the Source of CO After an Alarm

Because CO may dissipate by the time an investigator arrives, it may be difficult to locate the source of CO. See Chapter 5 "What You Must Know About CO." **BRK Brands, Inc. shall not be obligated to pay for any carbon monoxide investigation or service call.**

Using the Silence Feature

⚠ WARNING!

NEVER unplug your CO alarm to silence the horn. Use the silence feature. Unplugging the CO alarm removes your protection! See previous page for details on responding to an alarm.

The silence feature is intended to temporarily silence your CO Alarm's alarm horn while you correct the problem—it will not correct a CO problem. While the alarm is silenced, it will continue to monitor the air for CO.

When CO reaches the Full Alarm level, the Alarm will sound— repeating horn pattern: 4 beeps, a pause, 4 beeps, etc. Press and hold the Test/Silence button until the horn is silent. The initial Silence cycle will last approximately 4 minutes.

NOTE:

After the initial 4-minute Silence cycle, the CO Alarm re-evaluates present CO levels and responds accordingly. If CO levels remain potentially dangerous—or start rising higher—the horn will start sounding again.

While the detector is silenced:

If the CO Alarm... is silent for only 4 minutes, then starts sounding loudly— 4 beeps, then a pause, 4 beeps, then a pause. Red light continues flashing...

This means... CO levels are still potentially dangerous.

If the CO Alarm...remains silent. Only the green light is on....

This means...unit has returned to normal operation.

CHAPTER 4: *Testing and Maintenance*

WEEKLY TESTING

Push and hold the Test/Silence button on the cover until a loud alarm sounds— 4 beeps, a pause, then 4 beeps. The alarm sequence should last for 5-6 seconds. If the Alarm ever fails to test properly, replace it immediately.

If the CO Alarm is not working properly, refer to the “Limited Warranty” at the end of this manual.

WARNING!

The Test/Silence button is the only proper way to test the CO Alarm. NEVER use vehicle exhaust! Exhaust may cause permanent damage and voids your warranty.

WARNING!

DO NOT stand close to the alarm when the horn is sounding. Exposure at close range may be harmful to your hearing. When testing, step away when horn starts sounding.

REGULAR MAINTENANCE

To keep the CO Alarm in good working order:

- Test it every week using the Test/Silence button.
- Vacuum the CO Alarm cover at least twice a year, using the soft brush attachment. Test the Alarm again after vacuuming.

CAUTION!

DO NOT spray cleaning chemicals or insect sprays directly on or near the CO Alarm. DO NOT paint over the CO Alarm. Doing so may permanently damage the CO Alarm.

IMPORTANT!

Household cleaners, aerosol chemicals, and other contaminants can affect the sensor. When using any of these materials near the alarm, make sure the room is well ventilated.

IMPORTANT!

If your home is being fumigated, unplug the unit temporarily and put it where it will not be exposed to chemicals or fumes. When fumigation is complete and all traces of fumes clear, plug the unit back in and retest it.

CHAPTER 5: *What You Need To Know About CO*

What is CO?

CO is an invisible, odorless, tasteless gas produced when fossil fuels do not burn completely, or are exposed to heat (usually fire). Electrical appliances typically do not produce CO.

These fuels include: Wood, coal, charcoal, oil, natural gas, gasoline, kerosene, and propane.

Common appliances are often sources of CO. If they are not properly maintained, are improperly ventilated, or malfunction, CO levels can rise quickly. CO is a real danger now that homes are more energy efficient. "Air-tight" homes with added insulation, sealed windows, and other weatherproofing can "trap" CO inside.

Symptoms of CO Poisoning

These symptoms are related to CO POISONING and should be discussed with ALL household members.

Mild Exposure Slight headache, nausea, vomiting, fatigue ("flu-like" symptoms).

Medium Exposure Throbbing headache, drowsiness, confusion, fast heart rate.

Extreme Exposure Convulsions, unconsciousness, heart and lung failure. Exposure to Carbon Monoxide can cause brain damage, death.

CAUTION!

Some individuals are more sensitive to CO than others, including people with cardiac or respiratory problems, infants, unborn babies, pregnant mothers, or elderly people can be more quickly and severely affected by CO. Members of sensitive populations should consult their doctors for advice on taking additional precautions.

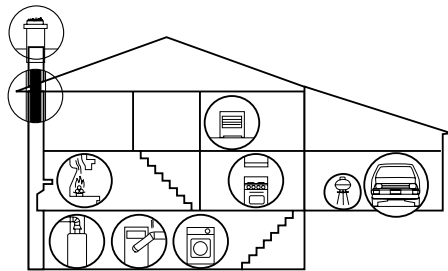
Finding the Source of CO After an Alarm

Carbon monoxide is an odorless, invisible gas, which often makes it difficult to locate the source of CO after an alarm. These are a few of the factors that can make it difficult to locate sources of CO:

- House well ventilated before the investigator arrives.
- Problem caused by "backdrafting."
- Transient CO problem caused by special circumstances.

BRK Brands, Inc. shall not be obligated to pay for any carbon monoxide investigation or service call.

Potential Sources Of CO In The Home



Fuel-burning appliances like: portable heater, gas or wood burning fireplace, gas kitchen range or cooktop, gas clothes dryer.

Damaged or insufficient venting: corroded or disconnected water heater vent pipe, leaking chimney pipe or flue, or cracked heat exchanger, blocked or clogged chimney opening.

Improper use of appliance/device: operating a barbecue grill or vehicle in an enclosed area (like a garage or screened porch).

Transient CO problems: "transient" or on-again-off-again CO problems can be caused by outdoor conditions and other special circumstances.

The following conditions can result in transient CO situations:

1. Excessive spillage or reverse venting of fuel appliances caused by outdoor conditions such as:
 - Wind direction and/or velocity, including high, gusty winds. Heavy air in the vent pipes (cold/humid air with extended periods between cycles).
 - Negative pressure differential resulting from the use of exhaust fans.
 - Several appliances running at the same time competing for limited fresh air.
 - Vent pipe connections vibrating loose from clothes dryers, furnaces, or water heaters.
 - Obstructions in or unconventional vent pipe designs which can amplify the above situations.
2. Extended operation of unvented fuel burning devices (range, oven, fireplace).
3. Temperature inversions, which can trap exhaust close to the ground.
4. Car idling in an open or closed attached garage, or near a home.

These conditions are dangerous because they can trap exhaust in your home. Since these conditions can come and go, they are also hard to recreate during a CO investigation.

How Can I Protect My Family?

A CO Alarm is an excellent means of protection. It monitors the air and sounds a loud alarm before Carbon Monoxide levels become threatening for average, healthy adults.

A CO Alarm is not a substitute for proper maintenance of home appliances.

To help prevent CO problems and reduce the risk of CO poisoning:

- Clean chimneys and flues yearly. Keep them free of debris, leaves, and nests for proper air flow. Also, have a professional check for rust and corrosion, cracks, or separations. These conditions can prevent proper air movement and cause backdrafting. Never “cap” or cover a chimney in any way that would block air flow.
- Test and maintain all fuel-burning equipment annually. Many local gas or oil companies and HVAC companies offer appliance inspections for a nominal fee.
- Make regular visual inspections of all fuel-burning appliances. Check appliances for excessive rust and scaling. Also check the flame on the burner and pilot lights. The flame should be blue. A yellow flame means fuel is not being burned completely and CO may be

present. Keep the blower door on the furnace closed. Use vents or fans when they are available on all fuel-burning appliances. Make sure appliances are vented to the outside. Do not grill or barbecue indoors, or in garages or on screen porches.

- Check for exhaust backflow from CO sources. Check the draft hood on an operating furnace for a backdraft. Look for cracks on furnace heat exchangers.
- Check the house or garage on the other side of shared wall.
- Keep windows and doors open slightly. If you suspect that CO is escaping into your home, open a window or a door. Opening windows and doors can significantly decrease CO levels.

In addition, familiarize yourself with all enclosed materials. Read this manual in its entirety, and make sure you understand what to do if your CO Alarm alarms.

CHAPTER 6: *Underwriters Laboratories Inc. UL2034*

What Levels of CO Cause an Alarm?

Underwriters Laboratories Inc. UL2034 defines 3 specific alarm points by which all residential CO Alarms must alarm. They are measured in parts per million (ppm) of CO over time (in minutes).

UL2034 Required Alarm Points:

- If the alarm is exposed to **400 ppm** of CO, IT MUST ALARM BETWEEN 4 and 15 MINUTES
- If the alarm is exposed to **150 ppm** of CO, IT MUST ALARM BETWEEN 10 and 50 MINUTES.
- If the alarm is exposed to **70 ppm** of CO, IT MUST ALARM BETWEEN 60 and 240 MINUTES.

IMPORTANT!

CO Alarms are designed to alarm before there is an immediate life threat. Since you cannot see or smell CO, never assume it's not present.

- An exposure to 100 ppm of CO for 20 minutes may not affect average, healthy adults, but after 4 hours the same level may cause headaches.
- An exposure to 400 ppm of CO may cause headaches in average, healthy adults after 35 minutes, but can cause death after 2 hours.

IMPORTANT!

This CO Alarm measures exposure to CO over time. It alarms if CO levels are extremely high in a short period of time, or if CO levels reach a certain minimum over a long period of time. The CO Alarm generally sounds an alarm before the onset of symptoms in average, healthy adults.

Why is this important? Because you need to be warned of a potential CO problem while you can still react in time. In many reported cases of CO exposure, victims may be aware that they are not feeling well, but become disoriented and can no longer react well enough to exit the building or get help. Also, young children and pets may be the first affected. The average healthy adult might not feel any symptoms when the CO Alarm alarms. However, people with cardiac or respiratory problems, infants, unborn babies, pregnant mothers, or elderly people can be more quickly and severely affected by CO. If you experience even mild symptoms of CO poisoning, consult your doctor immediately!

CHAPTER 7: *Troubleshooting Guide*

Problem...	This means...	You should...
Green light is OFF. Unit will not alarm when you press the Test/Silence button.	Unit may not be plugged all the way in, or receiving power.	Gently push unit all the way into outlet. Make sure it is not plugged into an outlet controlled by a switch.
Unit "chirps" about twice a minute. Green light and Yellow lights are ON. Red light FLASHES. Digital Display shows "Err."	Unit malfunction. Unit needs to be replaced.	Units under warranty should be returned to manufacturer for replacement. See Chapter 8: "Limited Warranty" for details.
CO Alarm goes back into alarm 4 minutes after you press the Test/Silence button.	CO levels still indicate a potentially dangerous situation.	Refer to Chapter 3 "If Your CO Alarm Alarms" for details on how to respond to an alarm. If anyone is feeling ill, EVACUATE your home immediately.
CO Alarm alarms frequently even though no high levels of CO are revealed in an investigation.	The CO Alarm may be improperly located. Refer to "Where to Install Your CO Alarm."	Relocate your alarm. If frequent alarms continue, have home rechecked for potential CO problems. You may be experiencing an intermittent CO problem.
If you have any questions that cannot be answered by reading this manual, call our Consumer Affairs Department at 1-800-323-9005.		

CHAPTER 8: *General Limitations Of CO Alarms*

This CO Alarm is intended for residential use. It is not intended for use in industrial applications where Occupational Safety and Health Administration (OSHA) requirements for carbon monoxide detectors must be met.

CO Alarms will not work without power. This CO Alarm requires a continuous supply of AC power. Plug into an unswitched 120V AC outlet only.

This CO Alarm will not sense carbon monoxide that does not reach the sensor. This CO Alarm will only sense CO at the sensor. CO may be present in other areas. Doors or other obstructions may affect the rate at which CO reaches the CO Alarm. For this reason, if bedroom doors are usually closed at night, we recommend you install a CO Alarm in each bedroom and in the hallway between them.

CO Alarms may not sense CO on another level of the home. For example, a CO Alarm on the second level, near the bedrooms, may not sense CO in the basement. For this reason, one CO Alarm may not give adequate warning. Complete coverage is recommended. Place CO Alarms on each level of the home.

CO Alarms may not be heard. The alarm horn loudness meets or exceeds current UL standards of 85 dB at 10 feet. However, if the CO Alarm is installed outside the bedroom, it may not wake up a sound sleeper or one who has recently used drugs or has been drinking alcoholic beverages. This is especially true if the door is closed or only partly open. Even persons who are awake may not hear the alarm horn if the sound is blocked by distance or closed doors. Noise from traffic, stereo, radio, television, air conditioner, or other

appliances may also prevent alert persons from hearing the alarm horn. This CO Alarm is not intended for people who are hearing impaired.

CO Alarms are not a substitute for a smoke alarm. Although fire is a source of carbon monoxide, this CO Alarm does not sense smoke or fire. This CO Alarm senses CO that may be escaping unnoticed from malfunctioning furnaces, appliances, or other sources. Early warning of fire requires the installation of smoke alarms.

CO Alarms are not a substitute for life insurance. Though these CO Alarms warn against increasing CO levels, BRK Brands, Inc. does not warrant or imply in any way that they will protect lives from CO poisoning. Homeowners and renters must still insure their lives.

CO Alarms have a limited life. Although the CO Alarm and all of its parts have passed many stringent tests and are designed to be as reliable as possible, any of these parts could fail at any time. Therefore, you must test your CO Alarm weekly.

CO Alarms are not foolproof. Like all other electronic devices, CO Alarms have limitations. They can only detect CO that reaches their sensors. They may not give early warning to rising CO levels if the CO is coming from a remote part of the home, away from the CO Alarm.

Limited Warranty

Coverage: BRK Brands, Inc. warrants its enclosed carbon monoxide alarm to be free from defects in materials and workmanship under normal use for a period of five years from the date of purchase. During the first year after the date of purchase, BRK Brands, Inc. will replace any defective carbon monoxide alarm without charge. During the next four years, BRK Brands, Inc. will replace any defective carbon monoxide alarm at a charge to you not to exceed BRK Brands, Inc.'s cost. This is your exclusive warranty.

This warranty is valid for the original retail purchaser from the date of initial retail purchase and is not transferable. Keep the original sales receipt. Proof of purchase is required to obtain warranty performance. If this carbon monoxide alarm is installed by a contractor, this warranty will be valid for the homeowner (or the first homeowner after installation) from the date of initial purchase by the contractor and is not transferable. Dealers, service centers, or retail stores selling this product do not have the right to alter, modify or any way change the terms and conditions of this warranty.

This warranty does not cover normal wear of parts or damage resulting from any of the following: negligent use or misuse of the product, use on improper voltage or current or use contrary to the operating instructions, disassembly, repair or alteration by anyone other than BRK Brands, Inc. Further, the warranty does not cover acts of God, such as fire, flood, hurricanes and tornadoes.

BRK Brands, Inc. shall not be liable for any incidental or consequential damages caused by the breach of any express or implied warranty. Except to the extent prohibited by applicable law, any implied warranty of merchantability or fitness for a particular purpose is limited in duration for five years. Some states, provinces, or jurisdictions do not allow the exclusion or limitation of incidental or consequential damages or limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state, or province to province.

Service: Units under warranty and in need of repair should be returned, shipping prepaid, to BRK Brands, Inc., Attn.: Consumer Affairs, 3920 Enterprise Court, Aurora, IL 60504-8132.

For your records, please record:

Date Purchased:

Where Purchased:

BRK Electronics® is a registered trademark of BRK Brands, Inc.

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